

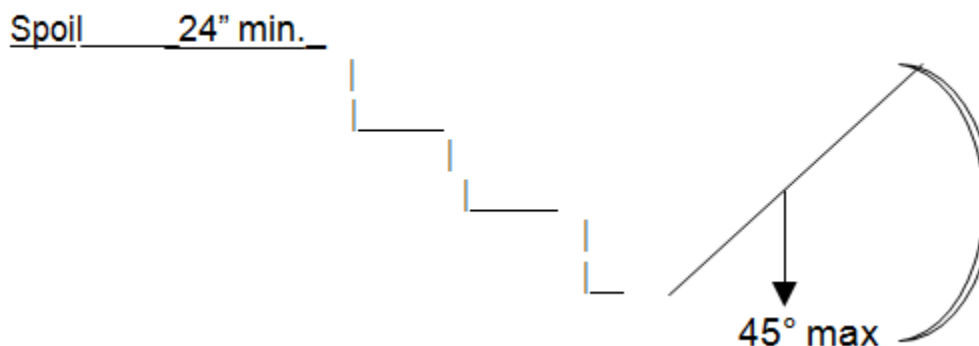
# Excavation Guidelines

All employees working in or near any excavations, including trenches, shall abide by the following rules:

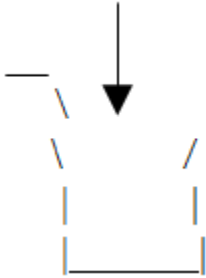
1. A competent person, meaning one who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employee and who has authorization to take prompt corrective measures to eliminate them, shall be present at all excavation work being performed.
2. All surface encumbrances that are located so as to create a hazard to employees shall be removed or supported, as necessary, to safeguard employees.
3. Utility installations, such as sewer, telephone, fuel, electric water lines, or any other underground installations that reasonably may be encountered during excavation work, shall be determined prior to opening an excavation.
4. A stairway, ladder, ramp, or other safe means of egress shall be located in trench excavations that are four feet or more in depth so as to require no more than 25 feet of lateral travel for employees.
5. Employees exposed to public vehicular traffic shall be provided with, and shall wear, warning vests or other suitable garments marked with or made of reflectorized or high visibility material.
6. No employee shall be permitted underneath loads handled by lifting or digging equipment.
7. Employees shall not be exposed to harmful levels of atmospheric contaminants such as oxygen deficient atmospheres, atmospheres containing flammable gas, and atmospheres containing other harmful gases.
8. Employees shall not work in excavations in which there is accumulated water or in excavations in which water is accumulating unless adequate precautions have been taken to protect employees against the hazards posed by water accumulation.
9. All excavated or other material shall be kept at least two feet from the edge of excavations, or retaining devices shall be used to prevent excavated or other material and equipment from rolling into excavations.
10. Excavations more than five feet in depth, or excavations less than five feet that show indications of a potential cave-in, in which employees must work in, shall be either shored or sloped or employees must shielded in accordance with OSHA Construction standard 1926.652.
11. Daily inspections of excavations, the adjacent areas, and the protective systems shall be made by a competent person for evidence of a situation that could result in possible cave-ins or other hazardous conditions.
12. All employees shall wear hard hats when working in an excavation.

## Trenching Requirements

1. Trenches 5 feet or more in depth must be sloped, benched, or shored.
2. Most of our soils are a Type B to Type C: 45-degree slope from heel is required for Type B. That is a 1:1 horizontal to vertical ratio. Type C soil requires a slope of 1 ½: 1, horizontal to vertical.



- Spoil pile must be 24 inches from rim of trench.
- Egress (means of exiting) must be within 25 feet of every person in trench; ladders must extend 3 feet above the landing area.
- Trench boxes must extend 18 inches above the vertical wall; the trench must not extend beyond 24 inches of the bottom of the trench box.



- Hard hats must be worn while in and/or around the excavation.
- If you feel threatened (unsafe) in the trench, tell your supervisor immediately.